TO AN OVERSIGHT ON THE PART OF THE UNDERSIGNED ATTORNEY SUCH CORRECTIONS WERE NOT SUBMITTED AT AN EARLIER DATE.

THE CORRECTIONS TO THE SPECIFICATION FOLLOW ON PAGES 3-9 AND THE DRAWING ANNOTATED SHEETS (14) SHOWING CHANGES AND THE REPLACEMENT SHEETS (14) ARE ATTACHED TO A LETTER TO THE OFFICIAL DRAFTSPERSON REQUESTING ENTRY OF THE REPLACEMENT SHEETS IN THE RECORD OF THE SUBJECT APPLICATION.

IT IS RESPECTFULLY SUBMITTED THAT UPON ENTRY OF THIS AMENDMENT THE SUBJECT APPLICATION IS IN CONDITION FOR ALLOWANCE AND ITS ALLOWANCE IS EARNESTLY SOLICITED.

Respectfully submitted,
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AMENDMENTS TO THE SPECIFICATION

Amend the paragraph "Field of the Invention:" as follows:

This invention relates to ~~method and~~ apparatus for winding and boxing wound coils of filamentary material, and more particularly to such method and apparatus for automatically inserting a payout tube into a radial opening in a wound coil of filamentary material, threading an end portion of the filamentary material through the payout tube, inserting the wound coil into a container and securing the end of the withdrawn filamentary material on the container, and closing the flaps of the container, sealing the container and removing the container from the machine.

In the SUMMARY OF THE INVENTION:

Paragraphs page 3, lines 4 to 14:

It is a primary object of the present invention to provide a method and apparatus for automatically winding filamentary material on a mandrel and packaging the wound coils ~~of filamentary material~~ in a container and including a payout tube for paying out the wound coil through a radial opening in the coil and an aligned opening in the container for retaining the payout tube.

It is a primary feature and advantage of the present invention that a wound coil of filamentary material ~~may be automatically packaged in a wound coil~~ having a radial opening for receiving a payout tube and through which the wound filamentary material is withdrawn from an aligned opening in a ~~the~~ container in which the wound coil is automatically packaged.

Paragraph beginning at Page 4, lines 1 to 11:

It is another object, feature and advantage of the subject invention that, in a method and apparatus for <u>automatically</u> winding and packaging coils of filamentary material, a rotating turret mechanism is employed wherein the coil may be wound and then subsequently the wound coil is rotated into a position where the wound coil is located in a boxing station wherein the flaps of the container are folded around the wound coil and the payout tube is automatically inserted through an opening in the container and into the radial opening such that a free end of the coil is grasped and removed through the payout tube and the opening to the exterior of the container.

Paragraph beginning at page 7, lines 22-23:

Fig. 18 illustrates the top closure panel of the container ~~posed~~ <u>positioned</u> to be formed over the top of the container; and

All paragraphs In the DETAILED DESCRIPTION of the invention:

The boxing machine of the present invention includes a filamentary material winding station 30 in which an end form 32, including a collapsible mandrel 33, is positioned in opposing operating relationship to a second end form 34, including a collapsible mandrel (not shown) is mounted to a rotating turret assembly 36, which also includes a third end form and an associated collapsible mandrel 39. The wound coil 40 is shown having been wound on the collapsible mandrel 33, ~~35~~, end ~~from~~ <u>form</u> 32, 34 structure by a winding mechanism well known to those skilled in the art. For an example

of the coil winding process and machinery see Windings' U. S. Patents 4,741,,495, 5,413,264 and 5,678, 778.

The turret assembly 36 shown in Fig. 1 is ready to rotate 180 degrees so that the wound coil 40 occupies the position of end form 38 and collapsible mandrel 39 and facing a wound coil loading station (not shown), but described below). In addition to mechanism for rotating the turret, the turret assembly also includes mechanism for controlling the collapsing and opening of the collapsible mandrels and for grasping and securing a fee end of the filamentary material for winding a coil. For the purposes of this invention it is understood that all such mechanism is known to to those skilled in the winding art.

Once a coil has been wound, the end 41 of the coil 40 is grasped and severed by a mechanism and technique well known to those skilled in the winding art, and the free end 41 of the coil 40 is moved into the vicinity of the open jaws 42a, 42b of a clamping mechanism 42 shown in Fig. 2 and which is located on one end of a collapsible mandrel 44 as shown in Fig. 2. As shown in Fig. 3, the free coil end 41a is clamped between the jaws of the clamping mechanism 42 and the filamentary material 47 is pushed toward the end form 46b and a filamentary material grabber mechanism 49 as illustrated in Figs. 5 and 6.

Add the following paragraph:

--The following description is taken with respect to Figs. 4-6. The entry of the collapsible mandrel 46 (with endform 46c) on the opposing mandrel 46a (with endform 46b) are shown as being moved into successively interleaving relationship as is respectively illustrated in Figs. 5 and 6. The filamentary material is being pushed toward the latching mechanism 49 with the collapsible mandrels 46, 46a being further engaged as the second

collapsible mandrel 46a is pushed into further engagement with the first collapsible mandrel 46. The filamentary material 47 is firmly engaged in the latch mechanism 49 at the base of the endform 46b. Collapsible mandrels 46, 46a are fully engaged as illustrated in Fig. 6.—

As is more fully described hereinafter, once a wound coil is located at the boxing station and within a partially formed container, a payout tube is inserted through a top panel of the container having an appropriate payout tube hole located therein and into the radial hole formed in the wound coil so that a free end of the filamentry material is withdrawn through the radial hole and the payout tube ~~so that~~ whereby the filamentary material 47 can be unwound from the inside of the coil (the REELEX method, proprietary to Windings, Inc., and as represented by the above-mentioned patents).

Fig. 7 illustrates the plastic payout tube supply source used in the present invention and which comprises a number of stacked payout tubes 50 positioned on an inclined ramp 52 and retained by a gate mechanism 54 which is appropriately activated to enable a single plastic payout tube to be released to slide downwardly toward a payout tube retainer 52a, whereby each plastic payout tube 50 is held with the flange 56 thereof resting on top of the retainer 54 and the entrance 50a of the plastic payout tube 50 extending downward as is apparent when an individual tube within stacked tubes 50 slides down incline 52.

Each individual plastic payout tube 50 in retainer 54 is engaged by a payout tube insertion mechanism 58 ~~is~~ located above the payout tube retainer mechanism (not shown) and is slid into the plastic tube 50 and which includes a movable ~~rod~~ fingers 60, 60a

extending below the bottom of the payout tube 50 and immediately adjacent a fixed portion of the payout tube insertion mechanism 58 as illustrated in Fig. 8.

Fig. 9 is an explanatory view of the payout tube insertion mechanism 58 and an expanded mandrel 62 but absent the wound coil to illustrate the manner in which the payout tube insertion mechanism 58 coacts to achieve its purpose of deposition positioning the plastic payout tube 50 and simultaneously therewith is able to engage the free inner end of the wound filamentary material (not shown). The insertion of the payout tube insertion mechanism ~~device~~ into and through the radial payout hole in the wound coil of filamentary material enables the movable rod 60 to squeeze the coil end against retention member 60a such that it may be extracted from the wound coil and through the payout tube, which is now engaged with the radial payout hole of the wound coil described with reference to Figs 14 and 16).

The unfolded containers 63 are stored in a box magazine 69a such as that illustrated in Fig. 10. The individual boxes containers are transported from ~~the~~ a magazine storage area (not shown) to the boxing station 69 (described more fully below) via a number of vacuum suction cups (not illustrated) that engage an individual container and lift it to the boxing station 69 were where is is released onto the boxing station in position to be folded and receive the wound coil.

The boxing station 69 is shown in Fig. 11 and includes a floor member 70, a back member assembly 72 and a vertically movable ramp member 74 facing a collapsible mandrel (not shown), which in normal operation, would include a wound coil to be boxed. When an unfolded container is placed in the boxing station 69 by the previously described

vacuum cups, a back panel 72a is lifted by engagement with back member 72 assembly so that it assumes a vertical position with a bottom panel (not shown) of the container resting on floor member 70. Movable front flap ramp member 74 serves to fold over the front flap of the container after the wound coil is inserted in the partially assembled container (not shown).

The partial view of boxing station 69 shown in Fig. 12 illustrates the wound coil 73 Positioned in partially formed contained 78 by rotation of the turret 36 and the associated end form and mandrel (Fig. 1, also reference mandrel 76 in Fig. 11) into confronting relationship with the boxing station, and more particularly movable ~~inclined~~ ramp member 74. The mandrel 76 (Fig. 11) is lowered and the boxing station 69 moved forward so that the wound coil is inserted in the partially formed container 78 as shown in Fig. 12 with side panels 79 and 80 of the container 78 being raised as illustrated. One of the elements 81 for engaing the side panel 80 is shown in ~~the~~ Fig. 12. A corresponding element exists on the opposite side of the container 78 for elevating side panel 79.

Add the following paragraph:

Back panel 72a of container 78 is shown in a vertical position resulting from the movement of back member assembly 72 as previously described with respect to Fig. 11. Top panel 83 of the container is shown with payout tube opening 84.

In Fig. 13 ~~element~~ member 82 closes a top panel 83, including payout tube opening 84 of the container. Back panel 72a ~~is~~ and member 81 are lowered thereby enabling ~~element~~ member 85 to engage and support side panel 80. A similar element on the other side of the container supports side panel 79.

Fig. 14 illustrates the payout tube insertion mechanism 90 inserting a payout tube 92 in the tube opening 93 in the top panel 83 of the container and the radial opening in the wound coil (not shown). A typical plastic payout tube 92 is shown in Fig. 14A.

Figs. 15 and 16 illustrate the manner in which the end of 100 of the wound coil 73 is grasped by fingers 102 of the payout tube and insertion mechanism 90 as it is withdrawn from the top panel 83. As shown in Fig. 16 ~~element~~ member 82 prevents top panel 83 from lifting as the payout tube insertion mechanism 90 is raised.

In Fig. 17 the payout tube insertion mechanism 90 has cleared the payout hole in top panel 83 with the end 100 of the wound coil 73 grasped between fingers 102. In Fig. 18 a further top panel 104 is being bent over by ~~element~~ member 106 (with the withdrawal of element 82) to secure the payout tube (not shown). Subsequently automatically operated gluing mechanisms glue appropriate portions of the side panels and the completed container is shown in Fig. 19 with end 100 of the wound coil projecting from the container 108, thereby enabling the filamentary material to be withdrawn through the radial opening and the payout tube.